In the Specification

Please make the following amendments that are provided by replacement paragraphs. The replacement paragraphs are identified by page and beginning line number. Marked-up versions of the amendments to the specification follow the remarks section of this response.

The paragraph on page 10, beginning on line 17:

A1

The CPCS 104 accepts call processing data, such as the translations, from operations systems and updates data in call processing tables in the signaling processors 106 and 110. The CPCS 104 maintains a current, historical, and future view of the call processing tables. The CPCS 104 also provides configuration data and control to the elements of the call processing system 102 including the signaling processors 106 and 110 and the connection systems 108 and 112 and collects data from the elements.

The paragraph on page 14, beginning on line 6:

A2

The operations system 210 transports translations for the call processing tables and other call-associated data to the CPCS 104. In addition, the operations system 210 accepts call-associated data from the CPCS 104. The operations system 210 comprises, for example, an alarm monitoring system that receives alarm data, an operations report system to receive trending data, an accounting system to receive accounting data, or a configuration system to transmit call processing translations or element configuration data to the CPCS 104. The operations system 210 may comprise other elements.

The paragraph on page 16, beginning on line 11:

A3

The call processor 204 also sends call information elements to the signaling interface 202 destined for another communication device, for example, identifying the selected connection 218 over which the user communications are to be connected. The other communication device may be, for example, another call processor or a switch which may handle call signaling.

The paragraph on page 17, beginning on line 12:

A4 It will be appreciated that a call can be connected in the opposite direction from the ATM side to the TDM side. Also, a call can be switched from an ATM system to another ATM system or from a TDM system to another TDM system. It will be appreciated that the call processor or switch on the terminating side of the call also transmits ECDBs to the CPCS 104 during the call for setup and termination.

The paragraph on page 19, beginning on line 1:

A5 The fault management system 306 manages alarm data, fault data, and other performance data from the signaling interface 202, the call processor 204, the interworking unit 206, and the ATM matrix 208. Initially, the signaling interface 202, the interworking unit 206, and the ATM matrix 208 report the performance data to the call processor 204 so that the processing tables can be updated. The call processor 204 then forwards the performance data to the CPCS 104, and the fault management system 306 configures the data in a reportable format. The fault management system 306 insures that the CPCS 104 broadcasts the alarm, fault, and other performance data to the required support systems, such as the network management system 324. Parameters for the required broadcast systems are configurable based upon an individual fault or alarm number or classification.

The paragraph on page 23, beginning on line 12:

A6 The call trace system 502 verifies the data for the call processing tables directly at the call processor 204 to ensure that the call processor and the CPCS 104 are synchronized. (See Figure 3.) For example, in a first function the call trace system 502 can traverse the call processing tables in the CPCS 104 based on data input by an operator. In another function a selected set of parameters determines if the call processor 204 and the CPCS 104 are synchronized. Automated routines ensure that synchronization and any out of synchronization conditions are reported as an alarm. In a third function the CIB data can be retrieved for review of SS7 routing information, the interworking unit connection information, the ATM matrix connection information, and other data that is used to determine quality of service on historical calls.

The paragraph on page 24, beginning on line16:

A7

The active call file database 512 contains the history of all the calls, including the call processor or switch, the calling number, the called number, the path, the equipment used to connect the calls, and echo canceller data. For example, the CIB file contains the exact number of the echo canceller for the call, if used, the exact connections, and the exact signaling links used. Therefore, by querying the active call file database 512, a specific call can be determined and the exact information for the call examined to determine loss of quality or other concerns for calls. This function is a significant advance over prior systems that are manual and employ a hit or miss strategy.

The paragraph on page 32, beginning on line 19:

A8

The matrix 906 is a controllable ATM matrix that provides cross connect functionality in response to control messages from the signaling processor 912. The matrix 906 has access to virtual path/virtual channels (VP/VCs) over which it can connect calls. For example, a call can come in over a VP/VC through the OC-M/STS-M interface 908 and be connected through the matrix 906 over a VP/VC through the OC-X/STS-X interface 910 in response to a control message received. by the signaling processor 912 through the control interface 904. Alternately, a call can be connected in the opposite direction. In addition, the call can be received over a VP/VC through the OC-M/STS-M interface 908 or the OC-X/STS-X interface 910 and be connected through the matrix 906 to a different VP/VC on the same OC-M/STS-M interface or the same OC-X/STS-X interface.